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LOCUS       MAU18263                1665 bp    DNA     linear   BCT 26-OCT-1995
DEFINITION  Mycobacterium avium alkyl hydroperoxidase C (ahpC) gene, complete
            cds, and OxyR homolog gene, complete cds.
ACCESSION   U18263
VERSION     U18263.1  GI:1040852
SOURCE      Mycobacterium avium
  ORGANISM  Mycobacterium avium
            Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
            Corynebacterineae; Mycobacteriaceae; Mycobacterium; Mycobacterium
            avium complex (MAC).
REFERENCE   1  (bases 1 to 1665)
  AUTHORS   Sherman,D.R., Sabo,P.J., Hickey,M.J., Arain,T.M., Mahairas,G.G.,
            Yuan,Y., Barry,C.E. III and Stover,C.K.
  TITLE     Disparate responses to oxidative stress in saprophytic and
            pathogenic mycobacteria
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 92 (14), 6625-6629 (1995)
REFERENCE   2  (bases 1 to 771)
  AUTHORS   Yamaguchi,R., Matsuo,K., Yamazaki,A., Takahashi,M., Fukasawa,Y.,
            Wada,M. and Abe,C.
  TITLE     Cloning and expression of the gene for the Avi-3 antigen of
            Mycobacterium avium and mapping of its epitopes
  JOURNAL   Infect. Immun. 60 (3), 1210-1216 (1992)
REFERENCE   3  (bases 1 to 1665)
  AUTHORS   Hickey,M.J.
  TITLE     Direct Submission
  JOURNAL   Submitted (07-DEC-1994) Mark J. Hickey, TB & Molecular
            Microbiology, PathoGenesis Corp., 201 Elliott Ave. W., Seattle, WA
            98119, USA
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Query Match          14.1%;  Score 235.8;  DB 1;  Length 1665;
Best Local Similarity  55.3%;  Pred. No. 5.7e-48;
Matches  506;  Conservative   0;  Mismatches  397;  Indels  12;  Gaps     2;
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Qy    469 ATTCACCGTTATAGTTATAGGCATGAGCAATAAAGAGTACCGGCCCACACTCGCCCAGCT 528
          |||  ||  || | |||||||| ||| | ||||    || | |||||| ||||| | ||
Db    682 ATTTCCCACTACACTTATAGGTATGCCCGATAAGACTTATCAGCCCACGATCGCCGGCCT 741

Qy    529 TCGCACCTTTGTCACCATCGCAGAATGCAAGCACTTTGGTACTGCTGCCACCAAGCTGTC 588
          ||| |||| |||| | |||| ||          || || |  ||| || || || | ||
Db    742 GCGCGCCTTCGTCGCGGTCGCCGAGAAGCGCCAATTCAGCGGTGCCGCAACGGCTTTGGG 801

Qy    589 CATTTCGCAGCCATCCCTCTCCCAGGCACTTGTCGCATTAGAAACAGGCCTGGGAGTTCA 648
          |    ||| | | || || |||| || || | || | || | || ||| ||  |||| ||
Db    802 AGTCAGCCAGTCGACGCTGTCGCAGGTGTTGGCGGCGCTGGAGGCGGGGCTGGGCACGCA 861

Qy    649 GCTGATTGAACGCTCCACCCGCAAGGTCATTGTCACCCCAGCGGGCGAGAAGTTGCTGCC 708
          | || | || ||||||||||| |||    ||| | |  ||  ||||| || | |||||||
Db    862 GTTGGTGGAGCGCTCCACCCGGCGTGTCTTCTTGACACCCCAGGGCGCCGAGCTGCTGCC 921

Qy    709 ATTCGCCAAATCCACCCTTGACGCGGCGGAGTCTTTCCTCTCCCACGCCAAGGGCGCCAA 768
          |||| |  ||    | || ||||| || | |||| || | ||  |  || ||| | | |
Db    922 GCACGCCCAGGCCGTGGTCGAGGCGGCCGACGCCTTCACCGCGGCGGCGGCGGGTTCGAC 981

Qy    769 CGGTTCGCTCACTGGACCGTTGACCGTAGGCATCATCCCCACGGCGGCTCCTTACATTTT 828
          |   ||| |  | |   ||  | |||  | ||||||||||| ||  || || ||| |  |
Db    982 GGACCCGTTGCGGGCCGGCATGCGGCTGGGGCTGATCCCCACGGTGGTGCCCTACGTGCT 1041
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Qy    · 829 GCCGTCAATGCTGTCCATCGTGGATGAAGAATATCCAGATCTGGAACCTCACATCGTCGA 888
            |||| | ||||| ||     | | ||| || | ||| | |   || |||
Db    1042 GCCGACCGTGCTGGCCGGAATCGCCGAACGGCGGCCCGGCCTGACCCTGCGGGTCACCGA 1101

Qy     889 GGACCAAACCAAGCATCTTCTCGCGTTGCTGCGCGACGGCGCCATCGACGTCGCCATGAT 948
            |||||| ||| | |  || || ||| |||||||||||| |||||| |||||| || ||||
Db    1102 GGACCAGACCGAACGGCTGCTGGCGGTGCTGCGCGAGGGCGCCCTCGACGCGGCGCTGAT 1161

Qy    · 949 GGCCCTGCCTTCTGAGGCACCAGGCATGAAGGAAATCCCCCTCTACGACGAAGACTTTAT 1008
            || |||||  |||| | | ||| | | |||||| ||||| |||||||||| || || |
Db    1162 CGCGCTGCCCGCCGAGACGGCGGGGCGTCACCGCGATCCCGATCTACGACGAGGATTTCGT 1221

Qy    1009 CGTCGTTACAGCTAGCGATCACCCCTTCGCCGGCCGCCAAGACTTAGAACTATCCGCCTT 1068
            |||        |     |  ||||| | || |||  |        |       | || |
Db    1222 GCTCGCGCTTCCGCCGGGCCACCCGCTGGCGGGCAAGCGCCGGGTGCCGGCGACGGCGCT 1281

Qy    1069 AGAAGACCTCGATCTGCTGCTTCTCGACGACGGACACTGCCTCCACGACCAAATTGTGGA 1128
            |  ||||| |||||||| || |||||| || |||||||||| | |||||| |||| ||||
Db    1282 GGCCGACCTGCCGCTGCTGCTGCTGGACGAGGGGCACTGCCTGCGCGACCAGGCGCTGGA 1341

Qy    1129 CCTGTGCCGCCGCGGAGACATCAACCCCATTAGCTCCACTACTGCTGTCACCCGCGCATC 1188
            | | ||||| |   |   |   |     |      ||| |      ||||| || |
Db    1342 CGTCTGCCACAAGGCGGGTGTGCGGGCGGAGCTGGCCAAT---------ACCCGGGCCGC 1392

Qy    1189 CAGCCTTACCACCGTCATGCAGCTCGTCGTCGCCGGCCTTGGATCCACCTTGGTCCCAAT 1248
            |   || |||||| ||||| |||  ||| ||  || ||||||| ||  |  | ||||
Db    1393 CTCGCTGGCCACCGCGGTGCAGTGCGTGACCGGCGGCCTGGGGGTGACGCTCATCCCGCA 1452

Qy    1249 CAGCGCAATCCCATGGGAATGCACCCGACCAGGACTGGCAACAGCCAACTTCAACTCTGA 1308
            ·|||||  ||||   |||       | ||       | ||||  ||| | ||| | |
Db    1453 GAGCGCGGTCCCGGTGGAGGCGTCGCGCAGCCGGCTGGGCCTGGCCCAGTTCGCCGCGCC 1512

Qy    1309 TGTCACCGCAAACCGCCGCATTGGATTGGTGTACCGTTCCTCTTCTTCTCGCGCCGAAGA 1368
            | | |   ||| ||||| || |||||| ||| |||||| ||| || ||     |||| |||
Db    1513 GCGCCCGG---GCCGGCGCATCGGCCTGGTGTTCCGCTCGTCGAGCGGGCGCGACGACTC 1569

Qy    1369 GTTCGAACAGTTTGC 1383
            | |   || | ||
Db    1570 CTACCGCGAGCTGGC 1584
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